

INTERNATIONAL SEARCH REPORT

PCT/IB2004/004112

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M8/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 04, 2 April 2003 (2003-04-02) & JP 2002 352837 A (NISSAN MOTOR CO LTD), 6 December 2002 (2002-12-06) cited in the application abstract	1-9
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 458 (E-1596), 25 August 1994 (1994-08-25) & JP 06 150952 A (ISHIKAWAJIMA HARIMA HEAVY IND CO LTD), 31 May 1994 (1994-05-31) abstract	1-9
P,A	EP 1 414 091 A (NISSAN MOTOR CO., LTD) 28 April 2004 (2004-04-28) the whole document	1-9

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

8 April 2005

Date of mailing of the international search report

19/04/2005

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2002352837 A	06-12-2002	NONE	
JP 06150952 A	31-05-1994	JP 3399566 B2	21-04-2003
EP 1414091 A	28-04-2004	JP 2004146114 A	20-05-2004
		EP 1414091 A2	28-04-2004
		US 2004076860 A1	22-04-2004